

IN THE CLAIMS

Amend the claims as follows.

1. (Previously Amended) A gene transfer vector which contains

- a) a transgene consisting of a therapeutic gene or a suicide gene and
- b) a nucleic acid sequence coding for a CD34 surface marker or a fragment of

the same or a variant of the same, wherein

said surface marker or fragment or variant is expressible as a surface marker and is
identifiable by an antibody against CD34.

2. (Previously Amended) The vector according to claim 1, wherein the nucleic
acid sequence codes for a surface marker comprising SEQ ID NO:2, 4 or 6, or for a
fragment of SEQ ID NO:2, 4 or 6, or for a variant of SEQ ID NO:2, 4 or 6, said surface
marker or fragment or variant being expressible as a surface marker and being
identifiable by an antibody against CD34.

3. (Previously Amended) The vector according to Claim 1, wherein the nucleic
acid sequence comprises SEQ ID NO: 1, 3 or 5, or a fragment of SEQ ID NO: 1, 3 or 5,
or a variant of SEQ ID NO: 1, 3 or 5, said fragment or variant coding for an amino acid
sequence which is expressible as a surface marker and is identifiable by an antibody
against CD34.

4. (Previously Amended) The vector according to Claim 1, wherein the vector is a retroviral vector.

5. (Previously Amended) The vector according to Claim 1, further comprising a second nucleic acid sequence coding for a second surface marker.

6. (Allowed) A vector with the accession no. DSM 13396.

7. (Previously Amended) A vector comprising a nucleic acid sequence coding for an amino acid sequence comprising SEQ ID NO:6, or for a fragment of SEQ ID NO:6, or for a variant of SEQ ID NO:6, wherein said fragment or variant is identifiable by an antibody against CD34.

8. (Previously Amended) A vector comprising a nucleic acid sequence comprising SEQ ID NO:5, or a fragment of SEQ ID NO:5, or a variant of SEQ ID NO:5, wherein said fragment or mutant or variant codes for a CD34 surface marker which is identifiable by an antibody against CD34.

9. (Previously Amended) An isolated host cell comprising a vector according to Claim 1.

10. (Previously Amended) The isolated host cell according to claim 9, wherein said host cell is a human cell.

11. (Previously Amended) The isolated host cell according to claim 10, wherein said cell is a T-lymphocyte.

Claims 12-34 (Canceled).

35. (new) A gene transfer vector which contains
a) a transgene consisting of a therapeutic gene or suicide gene and
b) a nucleic acid sequence coding an amino acid sequence which is identifiable by a CD34 specific antibody, said amino acid sequence being expressed as a surface marker.

36. (new) The vector according to claim 35, wherein the vector is a retroviral vector.

37. (new) The vector according to claim 35, further comprising a second nucleic acid sequence coding for a second surface marker.

38. (new) An isolated host cell comprising a vector according to claim 35.

39. (new) The isolated host cell according to claim 38, wherein said host cell is a human cell.

40. (new) The isolated host cell according to claim 39, wherein said cell is a T-lymphocyte.